

WHAT IS CLAIMED IS:

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1. A film formation apparatus comprising:
a film formation chamber comprising a plurality of temperature control means for heating a material,
wherein film formation is performed using a material purified by sublimation in the film formation chamber.

2. A film formation apparatus comprising:
a temperature control means; and
a plurality of systems controlled to different temperatures by the temperature control means;
wherein a material is purified by sublimation and a thin film is formed using the purified material in each of the plurality of systems.

3. A film formation apparatus according to claim 1 further comprises a load chamber, a transfer chamber connected to the load chamber, and said film formation chamber connected to the transfer chamber.

4. A film formation apparatus according to claim 1 further comprises a load chamber and an unload chamber, and the load chamber, the unload chamber and the film formation chamber are connected in serial with one other.

5. A film formation apparatus according to claim 1,

wherein the film formation chamber comprises at least one evaporation source comprising a plurality of systems,

wherein the plurality of systems are controlled to different temperatures, and

wherein the material is separated at respective temperatures.

6. A film formation apparatus according to claim 1,

wherein a material is evaporated in a first system controlled to a first temperature,

wherein a second system controlled to a second temperature has a state including a first gas and a first solid,

wherein the first solid evaporated by controlling the second system to the first temperature after the first gas is removed has a second gas and a second solid in a third system controlled to a third temperature, and

wherein the second gas obtained in the third system is the purified material.

7. A film formation apparatus according to claim 2,

wherein a material is evaporated in a first system controlled to a first temperature,

wherein a second system controlled to a second temperature has a state including a first gas and a first solid,

wherein the first solid evaporated by controlling the second system to the first temperature after the first gas is removed has a second gas and a second solid in a third system controlled to a third temperature, and

wherein the second gas obtained in the third system is the purified material.

8. A film formation apparatus comprising:

a heating mechanism for evaporating a material; and
a temperature control means for cooling the evaporated material stepwise in
respective regions; and
a function for isolating only a region cooled to a sublimation temperature of the
material,
wherein a thin film is formed using a precipitated material in the isolated region.

9. A film formation method comprising the steps of:

setting different temperatures to a material plural times in an evaporation source
comprising the material to purify the material by sublimation stepwise; and
forming a thin film on a substrate using the purified material.

10. A film formation method according to claim 9, wherein the material is an EL material.

11. A film formation apparatus comprising a film formation chamber, the film formation
chamber comprising:

a first open system comprising a first temperature control means for heating; and
a second open system comprising a second temperature control means for heating,
wherein the second open system is provided over the first open system and is free
to be tuned up side down.

12. A film formation apparatus comprising a film formation chamber, the film formation
chamber comprising:

a first open system comprising a first temperature control means for heating;

a second open system comprising a second temperature control means for heating;
and
a third open system comprising a third temperature control means for heating ,
wherein the second open system is provided over the first open system and is free
to be tuned up side down,
wherein the third open system is provided over the second open system.

13. A film formation apparatus according to claim 11, wherein the second open system further comprises an opening for discharging gas.

14. A film formation apparatus according to claim 12, wherein each of the second open system and the third open system further comprises an opening for discharging gas

15. A film formation apparatus according to claim 11, wherein each of the first temperature control means and the second temperature control means is a heater.

16. A film formation apparatus according to claim 12, wherein each of the first temperature control means, the second temperature control means, and third temperature control means is a heater.

17. A film formation apparatus according to claim 11 further comprises a load chamber, a transfer chamber connected to the load chamber, and said film formation chamber connected to the transfer chamber.

18. A film formation apparatus according to claim 12 further comprises a load chamber, a transfer chamber connected to the load chamber, and said film formation chamber connected to the transfer chamber.

19. A film formation apparatus according to claim 11 further comprises a load chamber and an unload chamber, and the load chamber, the unload chamber and the film formation chamber are connected in serial with one other.

20. A film formation apparatus according to claim 12 further comprises a load chamber and an unload chamber, and the load chamber, the unload chamber and the film formation chamber are connected in serial with one other.

21. A film formation apparatus according to claim 12 further comprises a first shutter between the second open system and the third open system and a second shutter over the third open system.

22. A film formation method comprising the steps of:

- evaporating a material in a first system controlled to a first temperature;
- controlling a second system to a second temperature to change the material into a first gas and a first solid;
- removing the first gas;
- evaporating the first solid in the second system controlled to the first temperature;
- controlling a third system to a third temperature to change the evaporated first solid into a second gas and a second solid; and

forming a thin film using the second gas over a substrate.

23. A film formation method comprising the steps of:
evaporating a material in a first system controlled to a first temperature;
controlling a second system to a second temperature to change the material into a first gas and a first solid;
removing the first gas; and
evaporating the first solid in the second system controlled to the first temperature.

24. A film formation method comprising the steps of:
evaporating a material in a first system controlled to a first temperature;
controlling a second system to a second temperature to change the material into a first gas and a first solid; and
forming a thin film using the second gas over a substrate.

25. A film formation method according to claim 22, wherein the material is an EL material.

26. A film formation method according to claim 23, wherein the material is an EL material.

27. A film formation method according to claim 24, wherein the material is an EL material.